

# Untitled-4 Formatted Alignment

A	hUCPH	ATGGTTGGGT TCAAGGCCAC AGATGTGCCC CCTACTGCCA CTGTGAAGTT	50
B	hUCP2 (Fleury)	ATGGTTGGGT TCAAGGCCAC AGATGTGCCC CCTACTGCCA CTGTGAAGTT	50
C	hUCP2 (Chen, Tularik)	ATGGTTGGGT TCAAGGCCAC AGATGTGCCC CCTACTGCCA CTGTGAAGTT	50
	hUCPH	TCTTGGGGCT GGCACAGCTG CCTGCATGCG AGATCTCATC ACCTTTCCTC	100
	hUCP2 (Fleury)	TCTTGGGGCT GGCACAGCTG CCTGCATGCG AGATCTCATC ACCTTTCCTC	100
	hUCP2 (Chen, Tularik)	TCTTGGGGCT GGCACAGCTG CCTGCATGCG AGATCTCATC ACCTTTCCTC	100
	hUCPH	TGGATACTGC TAAAGTCCCG TTACAGATCC AAGGAGAAAG TCAGGGGCCA	150
	hUCP2 (Fleury)	TGGATACTGC TAAAGTCCCG TTACAGATCC AAGGAGAAAG TCAGGGGCCA	150
	hUCP2 (Chen, Tularik)	TGGATACTGC TAAAGTCCCG TTACAGATCC AAGGAGAAAG TCAGGGGCCA	150
	hUCPH	GTGCGCGCTA CAGC CAGCGC CCAGTACCGC GGTGTGATGG GCACCATTTCT	200
	hUCP2 (Fleury)	GTGCGCGCTA CAGC CAGCGC CCAGTACCGC GGTGTGATGG GCACCATTTCT	200
	hUCP2 (Chen, Tularik)	GTGCGCGCTA CAGC CAGCGC CCAGTACCGC GGTGTGATGG GCACCATTTCT	200
	hUCPH	GACCATGGTG CGTACTGAGG GCCCCCGAAG CCTCTACAAT GGGCTGGTTG	250
	hUCP2 (Fleury)	GACCATGGTG CGTACTGAGG GCCCCCGAAG CCTCTACAAT GGGCTGGTTG	250
	hUCP2 (Chen, Tularik)	GACCATGGTG CGTACTGAGG GCCCCCGAAG CCTCTACAAT GGGCTGGTTG	250
	hUCPH	CCGGCCTGCA GCGCCAAATG AGCTTTGCCT CTGTCCGCAT CCGCCTGTAT	300
	hUCP2 (Fleury)	CCGGCCTGCA GCGCCAAATG AGCTTTGCCT CTGTCCGCAT CCGCCTGTAT	300
	hUCP2 (Chen, Tularik)	CCGGCCTGCA GCGCCAAATG AGCTTTGCCT CTGTCCGCAT CCGCCTGTAT	300
	hUCPH	GATTCTGTCA AACAGTTCTA CACCAAGGGC TCTGAGCATG CCAGCATTTG	350
	hUCP2 (Fleury)	GATTCTGTCA AACAGTTCTA CACCAAGGGC TCTGAGCATG CCAGCATTTG	350
	hUCP2 (Chen, Tularik)	GATTCTGTCA AACAGTTCTA CACCAAGGGC TCTGAGCATG CCAGCATTTG	350
	hUCPH	GAGCCGCCTC CTAGCAGGCA GCACCACAGG TGCCCTGGCT GTGGCTGTGG	400
	hUCP2 (Fleury)	GAGCCGCCTC CTAGCAGGCA GCACCACAGG TGCCCTGGCT GTGGCTGTGG	400
	hUCP2 (Chen, Tularik)	GAGCCGCCTC CTAGCAGGCA GCACCACAGG TGCCCTGGCT GTGGCTGTGG	400
	hUCPH	CCCAGCCCAC GGATGTGGTA AAGGTCCGAT TCCAAGCTCA GGCCCGGGCT	450
	hUCP2 (Fleury)	CCCAGCCCAC GGATGTGGTA AAGGTCCGAT TCCAAGCTCA GGCCCGGGCT	450
	hUCP2 (Chen, Tularik)	CCCAGCCCAC GGATGTGGTA AAGGTCCGAT TCCAAGCTCA GGCCCGGGCT	450
	hUCPH	GGAGGTGGTC GGAGATACCA AAGCACCCTC AATGCCTACA AGACCATTTG	500
	hUCP2 (Fleury)	GGAGGTGGTC GGAGATACCA AAGCACCCTC AATGCCTACA AGACCATTTG	500
	hUCP2 (Chen, Tularik)	GGAGGTGGTC GGAGATACCA AAGCACCCTC AATGCCTACA AGACCATTTG	500
	hUCPH	CCGAGAGGAA GGGTTCCGGG GCCTCTGGAA AGGGACCTCT CCCAATGTTG	550
	hUCP2 (Fleury)	CCGAGAGGAA GGGTTCCGGG GCCTCTGGAA AGGGACCTCT CCCAATGTTG	550
	hUCP2 (Chen, Tularik)	CCGAGAGGAA GGGTTCCGGG GCCTCTGGAA AGGGACCTCT CCCAATGTTG	550
	hUCPH	CTCGTAATGC CATTGTCAAC TGTGCTGAGC TGGTGACCTA TGACCTCATC	600
	hUCP2 (Fleury)	CTCGTAATGC CATTGTCAAC TGTGCTGAGC TGGTGACCTA TGACCTCATC	600
	hUCP2 (Chen, Tularik)	CTCGTAATGC CATTGTCAAC TGTGCTGAGC TGGTGACCTA TGACCTCATC	600
	hUCPH	AAGGATGCCC TCCTGAAAGC CAACCTCATG ACAGATGACC TCCCTTGCCA	650
	hUCP2 (Fleury)	AAGGATGCCC TCCTGAAAGC CAACCTCATG ACAGATGACC TCCCTTGCCA	650
	hUCP2 (Chen, Tularik)	AAGGATGCCC TCCTGAAAGC CAACCTCATG ACAGATGACC TCCCTTGCCA	650

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hUCPH	CTTCA	TTCT	GCCTTTGGGG	CAGGCTTCTG	CACCACTGTC	ATCGCCTCCC	700
hUCP2 (Fleury)	CTTCA	TTCT	GCCTTTGGGG	CAGGCTTCTG	CACCACTGTC	ATCGCCTCCC	700
hUCP2 (Chen, Tularik)	CTTCA	TTCT	GCCTTTGGGG	CAGGCTTCTG	CACCACTGTC	ATCGCCTCCC	700
hUCPH	CTGTAGACGT	GGTCAAGACG	AGATACATGA	ACTCTGCCCT	GGGCCAGTAC		750
hUCP2 (Fleury)	CTGTAGACGT	GGTCAAGACG	AGATACATGA	ACTCTGCCCT	GGGCCAGTAC		750
hUCP2 (Chen, Tularik)	CTGTAGACGT	GGTCAAGACG	AGATACATGA	ACTCTGCCCT	GGGCCAGTAC		750
hUCPH	AGTAGCGCTG	GCCACTGTGC	CCTTACCATG	CTCCAGAAGG	AGG3GCCCCG		800
hUCP2 (Fleury)	AGTAGCGCTG	GCCACTGTGC	CCTTACCATG	CTCCAGAAGG	AGG3GCCCCG		800
hUCP2 (Chen, Tularik)	AGTAGCGCTG	GCCACTGTGC	CCTTACCATG	CTCCAGAAGG	AGG3GCCCCG		800
hUCPH	AGCCTTCTAC	AAAGGGTTCA	TGCCCTCCTT	TCTCCGCTTG	GGTTCCTGGA		850
hUCP2 (Fleury)	AGCCTTCTAC	AAAGGGTTCA	TGCCCTCCTT	TCTCCGCTTG	GGTTCCTGGA		850
hUCP2 (Chen, Tularik)	AGCCTTCTAC	AAAGGGTTCA	TGCCCTCCTT	TCTCCGCTTG	GGTTCCTGGA		850
hUCPH	ACGTGGTGAT	GTTCGTCACC	TATGAGCAGC	TGAAACGAGC	CCTCATGGCT		900
hUCP2 (Fleury)	ACGTGGTGAT	GTTCGTCACC	TATGAGCAGC	TGAAACGAGC	CCTCATGGCT		900
hUCP2 (Chen, Tularik)	ACGTGGTGAT	GTTCGTCACC	TATGAGCAGC	TGAAACGAGC	CCTCATGGCT		900
hUCPH	GCCTGCACTT	CCCGAGAGGC	TCCCTTCTGA				930
hUCP2 (Fleury)	GCCTGCACTT	CCCGAGAGGC	TCCCTTCTGA				930
hUCP2 (Chen, Tularik)	GCCTGCACTT	CCCGAGAGGC	TCCCTTCTGA				930

# Untitled-5 Formatted Alignment

A hUCP2 (Fleury) B hUCP2 (Chen, Tularik) C hUCPH	MVGFKAIDVP PIAIVKRECA GPACGADDEL TPPIIDIAKVR PLOIGESOEI	50
	MVGFKAIDVP PIAIVKRECA GPACGADDEL TPPIIDIAKVR PLOIGESOEI	50
	MVGFKAIDVP PIAIVKRECA GPACGADDEL TPPIIDIAKVR PLOIGESOEI	50
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	VRATASAOVR GVMCHHIMV RKEGPRSLVN GLVAGLOROM SEASVRIGELV	100
	VRATASAOVR GVMCHHIMV RKEGPRSLVN GLVAGLOROM SEASVRIGELV	100
	VRATASAOVR GVMCHHIMV RKEGPRSLVN GLVAGLOROM SEASVRIGELV	100
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	DSVKQFYTG SEHASIGSRL PACSTIGALA VAVQPIIDW KYRROGARA	150
	DSVKQFYTG SEHASIGSRL PACSTIGALA VAVQPIIDW KYRROGARA	150
	DSVKQFYTG SEHASIGSRL PACSTIGALA VAVQPIIDW KYRROGARA	150
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	GGRRYOSIV NAKKITAREE GERGLKGIS ENVARNAIVN GAEHIVYDDEI	200
	GGRRYOSIV NAKKITAREE GERGLKGIS ENVARNAIVN GAEHIVYDDEI	200
	GGRRYOSIV NAKKITAREE GERGLKGIS ENVARNAIVN GAEHIVYDDEI	200
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	KDALLKANEM HDDDPCHTS AFGAGGQIIV TASEVDVWNI RVANSATGCOY	250
	KDALLKANEM HDDDPCHTS AFGAGGQIIV TASEVDVWNI RVANSATGCOY	250
	KDALLKANEM HDDDPCHTS AFGAGGQIIV TASEVDVWNI RVANSATGCOY	250
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	SSAGHCALIM LOKGCPRAIV KCHMPSEHRE GSNVWMEVNI MBOLKRAVMA	300
	SSAGHCALIM LOKGCPRAIV KCHMPSEHRE GSNVWMEVNI MBOLKRAVMA	300
	SSAGHCALIM LOKGCPRAIV KCHMPSEHRE GSNVWMEVNI MBOLKRAVMA	300
hUCP2 (Fleury) hUCP2 (Chen, Tularik) hUCPH	AGTSREAPF	309
	AGTSREAPF	309
	AGTSREAPF	309

Figure 2